PROJECT REPORT

ON

Bus Reservation Management.

BY

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MASTER IN COMPUTER APPLICATION



ASM's Institute of Computer Studies, Pimpri, Pune.

(Affiliated to University of Pune & Approved by AICTE)

PUNE-411018 2013-2015

Bus Reservation Management

[TERMINAL BASED]

## CERTIFICATE

**Department Of Masters Of Computer Application**

**This is to certify that a project on, Plant Nursery**

**has been successfully completed By**

**Miss Mousmi Dave**

**Miss Sanjana Phalke**

**Miss Rachana Dushing**

**In a project batch of five students First Year of Masters of Computer Application**

**Towards partial fulfillment for the award of**

**Masters of Computer Application [MCA]**

**This work is carried out them under our supervision & Guidance Of**

**Prof : Dr.Roopa Praveen Maam**

**ASM INSTITUTE OF BUSINESS MANAGEMENT & RESEARCH[IBMR], PIMPRI CHINCHWAD – 411019**

**PROJECT SUBMISSION The student of 1st SEM of Masters of Computer Application [MCA]. Humbly submitted that we have completed from time to time project work as described in the report by my own skill and study between the period from January 2022 to February 2022 as per guidance Prof: Dr.Roopa Praveen Maam**

**ASM INSTITUTE OF BUSINESS MANAGEMENT & RESEARCH [IBMR], PIMPRI CHINCHWAD -411019**

## ACKNOWLEDGMENT

**Lastly, we would like to thanks all the Professors of Audyogik Shikshan Mandal Institute Of Business Management and Research, Pimpri Chinchwad for their help to provide information to complete this project. It gives me great pleasure to present my project report on "JAVA" for "Audyogik Shikshan Mandal Institute of Business Management And Research". As per requirement of the curriculum of the course of "Masters of Computer Application" from the University of Pune at the Audyogik Shikshan Mandal Institute Of Business Management And Research. Firstly, I am hearty thankful to project conductor and guide <u>Prof: Mrs. Roopa Maam</u>**

# INDEX

# Introduction:

Traveling is a large growing business across all countries. Bus reservation system deals with maintenance of records of details of each passenger. It also includes maintenance of information like schedule and details of each bus. We observed the working of the Bus reservation system and after going through it, we get to know that there are many operations, which they have to do manually. It takes a lot of time and causing many errors while data entry. Due to this, sometimes a lot of problems occur and they were facing many disputes with customers. By using this software, we can reserve tickets from any part of the world, through telephone lines, via internet. Customer can check availability of bus and reserve selective seats. Our project is about Bus Reservation system. In this system user can see the destination where he/she wants to travel from Bus, book a ticket, can pay online & view the bill.

These systems mainly include following section: -

- ➢ Destination
- ➢ Passengers
- ➢ Billing
- ➢ View

In the Destination section, if the user will get to know where this bus can travel like user will get to know different destination buses. From there user can see how many routes are there & there prices. If user want to continue they can hit on Passenger section, there they will have to give details , number of passengers , how many are seniors citizen according to that discount will be given on there payment. In our system the one who's senior citizen, student are eligible for discount. User have to pay full payment before going on further steps. Once your Payment is done user is able to see they have received the discount, if they are eligible. After all this steps you will get Bill in Billing Section

# Existing system and need for system:

Existing System is mainly based on GUI. It can book the bus seats for the future dates as well. If user wants to cancel, he tickets then it uses to charge some amount off cancellation fees according to your cancellation timing & will refund the remaining amount to the user. In existing system User can pay from credit card, Debit Card or Wallet as well. User is able to book the seats as per there convince. They used to get the bill via or through mail. Existing system have the login page of the user where they can fill their details like name, DOB address and all.  When a user creates the accounts, it fills all the details & try to login the system. User will see the destination bus, there price, there timing as well. If everything looks good, they use to book the seat according to their convince. While doing the payment sometimes user have to give the OTP that will received on the registered number. Once OTP is given to the system it will proceed the payment & so on.

# Scope of work:

This System is Terminal based. It is regarding booking bus seats by the user. User can book seats by having a look on the destination list & their price. Booking of the seats will be consider for the present day only & not for the future dates. System will provide the discount to the senior citizen & students. The discount amount will be deducted from the final price before doing the payment. While booking the seats user will get to know whether seats are available or not. If it's not available then user won't able to book the seats for that day. In this system User will be able to see the destination list & it's price. After this user will able to book the seats by entering the destination details, number of seats user wants to book, is any user is coming under Senior Citizen or Student discount or not & before exiting user have to do full payment. Once user is done with payment the seat is reserve for that user. We have Billing function it will display the bill to user. There is the View section in our system over there we'll find the details of the user by hitting their names.

# Operating Environment – Hardware and software:

Hardware Requirements:

- PC with Pentium IV processor.
- 512 MB RAM or above.
- 8 GB Hard Disk or above.

Software Requirements:

- Operating System: Windows XP (or latest).
- Front end: Java Runtime
- Platform: Java Swings
- Integrated development environment (IDE): Eclipse

# Proposed system:

The Proposed System is Terminal based which is very unique. The benefit of the terminal-based system is it work quite fast so user will be able to book the tickets & will not face dawdle while using the system. This system will provide the discount to the user who is Senior citizen or Student which currently no one else is providing in the market. Till now only user is able to login the system & book the seats. There are few sections in the User Module such as Destination, Passengers, Billing & View. Our system is User Friendly. User will be able to book the seats/tickets if they're not from IT background.

# <u>Objective of system:</u>

The Bus ticket reservation system is currently maintaining the project Transport Company's process manually which is a very time-consuming process. It deals with transport industry's ticket booking and transport maintenance, so it becomes a very tedious job for the ticket booking transporter to look after these particulars to complete the task at right time. The bus ticket booking system not only deals with transporters owned vehicles but also takes into consideration about the other types project of system transport vehicles available with other transporters. This system project is made as user friendly as possible so that anyone can use it with little knowledge of system computers. This system will lead to increase in the

ticket booking efficiency of the project Staff and members of the Ticket Booking Agency with little throughput. Up-to-date information of the system Performance status and other enquires. We provide up to date information that is not possible manually. Since our system is on Terminal Based it will act efficient & bit fast. This system will lead to increase in the ticket booking efficiency of the project Staff and members of the Ticket Booking Agency with little throughput. The objective of my project is to make easy the ticket booking project system of Ticket Booking Agency simple, reliable, user friendly, and corrective. Moreover, less time consuming as compared to manual work.

The Bus ticket reservation system is currently maintaining the project Transport Company's process manually which is a very time-consuming process. It deals with transport industry's ticket booking and transport maintenance, so it becomes a very tedious job for the ticket booking transporter to look after these particulars to complete the task at right time. The bus ticket booking system not only deals with transporters owned vehicles but also takes into consideration about the other types project of system transport vehicles available with other transporters.

To develop a software application that supports Specific to the project Travel Agency Automation that can solve all tedious tasks related to ticket booking in a travel agency.

➢ This system will lead to increase in the ticket booking efficiency of the project Staff and members of the Ticket Booking Agency with little throughput.

➢ This system project is made as user friendly as possible so that anyone can use it with little knowledge of system computers.

➢ The ticket booking project will reduce the ticket booking tedious job of system paperwork by keeping all the project details of bus ticket booking, cancelling tickets are stored in the form database in computer's hard disk.

➢ Up-to-date information of the system Performance status and other enquires.

➢ We provide up to date information that is not possible manually.

➢ The objective of my project is to make easy the ticket booking project system of Ticket Booking Agency simple, reliable, user friendly, and corrective. Moreover, less time consuming as compared to manual work.

Report of the ticket booking different aspects can be generated like Available sits, current status of booking Cancelling details monthly status report etc.

During the project past several decades' personnel function has been transformed from a

Relatively obscure record keeping staff to central and top-level management function.

There are many factors that have influenced this system transformation like technological

Advances, professionalism, and general recognition of human system beings as most important resources.

A computer-based management system is designed to handle all the project primary

information required to maintain the ticket booking project library system.

This project intends to introduce more user friendliness in the various activities such as record updating, maintenance, and searching of books.

The searching of system record has been made quite simple as all the ticket booking details of the customer and can be obtained by simply keying in the project identification of that bus Ticket Booking

Similarly, record maintenance and updating can also be accomplished by using the identification of the ticket booking system customer with all the details being automatically generated. These details are also being promptly automatically updated in the master file thus keeping the record absolutely up-to-date.

The project entire information has maintained in the project database or Files and whoever wants to retrieve can't retrieve, only authorization user can retrieve the necessary information which can be easily be accessible from the file.

The main objective of the project entire activity is to automate the ticket booking process of day-to-day activities of system Library like:

1. Ticket activities.
2. Creation of a Customer id.
3. Assign a bus Tickets according to customer's demand.
4. Advance bookings.
5. Bus Ticket Cancellation.
6. Feedbacks.

# ANALYSIS AND DESIGN

**E-R DIAGRAM SYMBOL USED IN E-R DIAGRAM:**

The E-R model uses few basic concepts in producing an E-R diagram. These concepts are: -

1. Entity
2. Relationship
3. Attribute

1). Entity:

An entity is an object or anything, which is distinguishable from objects.

2). Relationship:

A relationship is meaningful association, a linking or connection between entities.

3). Attribute:

An attribute is any aspect quality or description of either an entity or relationship.

**SYMBOL FOR E-R DIAGRAM:**

| Symbol | Symbol Name | Symbol Represent |
|---|---|---|
| | | |
| Rectangle | | Entity Set |
| Eclipse | | Attribute |
| Diamond | | Relationship Set |
| Line | | Link between two Entity Set |

**DATA FLOW DIAGRAM:**

Data flow diagram is used to represent data & processes that manipulate it. The data flow diagram enables the software engineer to develop the model of information domain & functional domain at same time. As the DFD is refined into greater levels of details, the analyst performs implicit functional decomposition of the system. A data flow Diagram (DFD) is one of the popular graphical tools uses to depict the flow of data through a system. DFD shows the processes, data stores, data flow & the source & destination entries. A few simple guidelines can aid immeasurably during derivation of data flow diagram.

1. The level 0 DFD should depict the system as a single bubble.
2. The primary input & output should be carefully noted.
3. Refinement should be by isolating candidate processes, data object &Stores to be represented at the next level.
4. All arrows & bubbles should be labelled with meaningful names.
5. Information flow continuity must be maintained from level to level. One bubble at time should be refined.

# TYPES OF DFD's:

There are two types of DFD's as follows: -

1. Physical DFD's
   Physical DFD's depict the physical elements like people, report, documents, departments etc. Physical DFD's shows an implementation dependent view of the system.
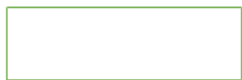
2. Logical DFD's
   Logical DFD's depict the logical elements like data process & events those are abstract than physical DFD's. Logical DFD's shows an implementation independent view of the system.

# CONTEXT DIAGRAM:

The top-level diagram is called as a 'context diagram'. Context diagram contain single process, but it plays a very important role in studying the current system. Context diagram is constructed to show the highest-level model of the system. This is the most general or broadcast picture of the current system. They are too representing the scope or boundaries of the system. Their purpose is identifying what is to include in the system under study.

1. Symbol Used for Data Flow Diagram:

| SYMBOL | SYMBOL NAME | REPRESENT |
|---|---|---|
| | External Entity | A Source or destination of data which is external system. |
| | Data Flow | It is a packet of data. It may be in the form of document, letter, telephone call etc. |
| | Process | Here flow of data transferred. |
| | Data Store | Any store data but with no difference to physical method of storing |

# CONTEXT LEVEL DFD FOR BUS RESERVATION SYSTEM

```
USER  →  Bus Reservation System  →  LOGIN
```

**FIRST LEVEL DFD**

```
User  →  Bus Reservation System  →  Destination
```

**(A)**

```
user  →  Bus Reservation System  →  Passengers
```

**(B)**

```
user  →  Bus Reservation System  →  Billing
```

## Second Level DFD

| user | → | Bus Reservation System | → | View |
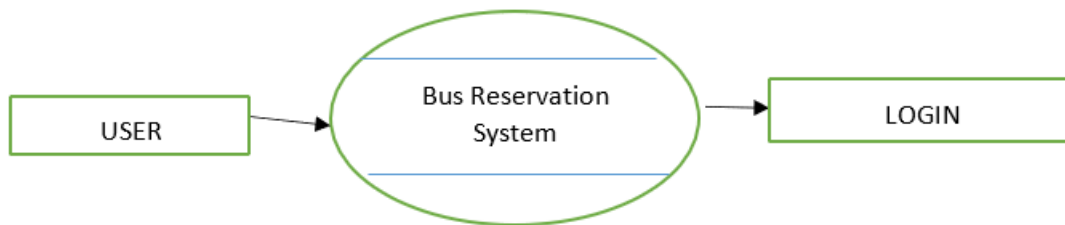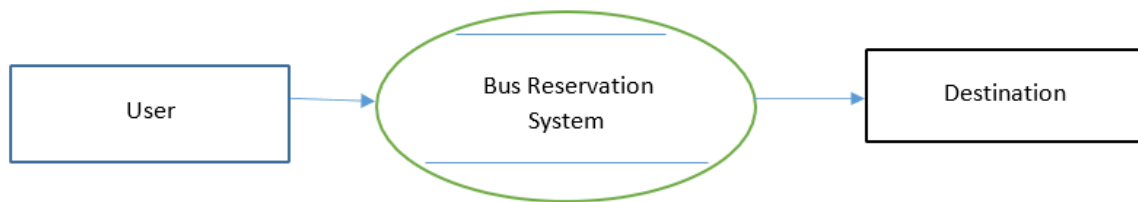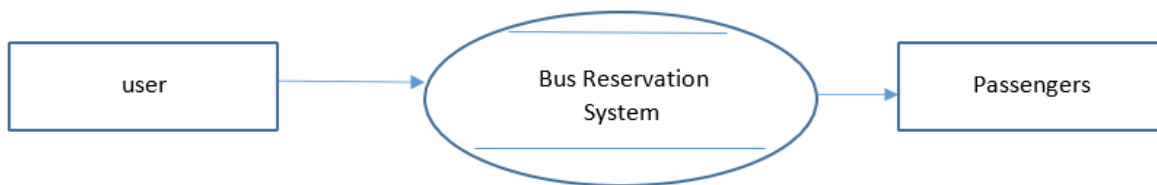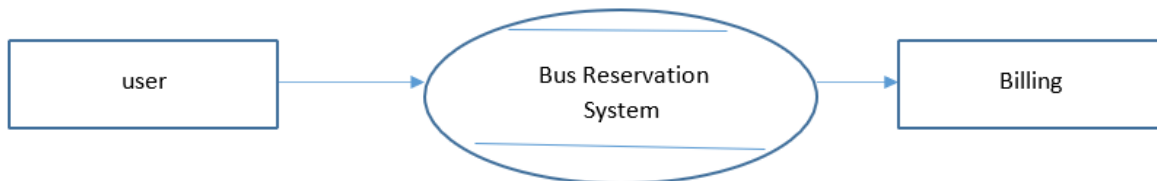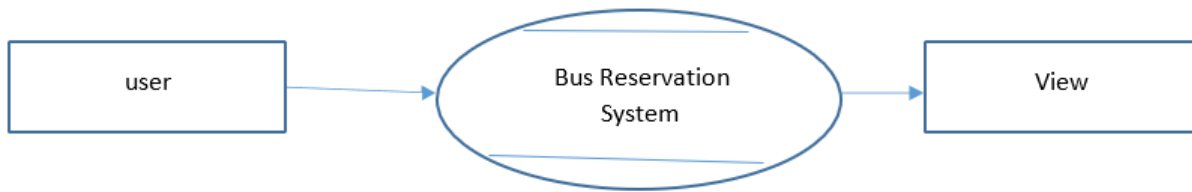
# Use Case Diagram
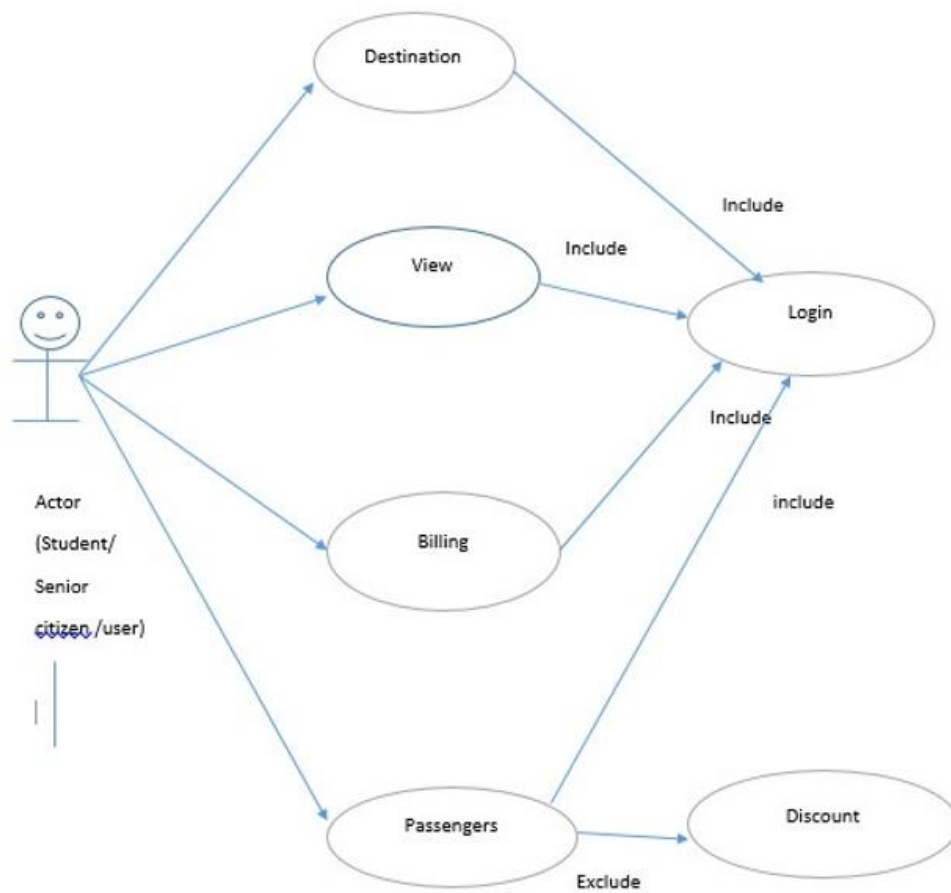
# DRAWBACKS AND LIMITATIONS

The most important limitation of the existing system is its Manual system.

- Lack of Security.
- There is no function which can refund your payment.
- User is unable to change the route once is confirmed.
- AC Bus facility isn't available yet.
- This Application is based on Terminal.
- No Admin account yet only user account is there.
- There is no customizable GUI is there.
- There is no much details of users.
- Current system isn't sending bill via mail or SMS.
- Booking is for current day only & for future dates.

# FUTURE ENHANCEMENTS

This system isn't supporting the cancelation of your ticket yet if you want. In that case your payment will be return to you after deducting some charges. We'll try to support this feature in next version. Along with that we'll allow user to choose their selective seats for travelling. All this customize feature will attract the customer to travel using our system. In near future we will add the features like receiving email or messages after booking seats. And we'll try to add more user's attributes like gender, phone number, resident address, email address etc. We'll like to add GUI as well in our next version. In near future there will be a greater number of destination our bus will travel/visit. So that our customer can visit most of the places through our bus. We'll add AC bus as well in our destination list, it's costs will be different than the regular one. And user will be able to cancel the ticket & can change the current route if he/she wants. User can change the theme also into future update like Light theme or Dark theme. Going forward we'll add Admin account as well so that changes also can make by Admin. Admin can be able to see routes & can make changes (add/delete bus) according to the time.  Going forward user can pay using a credit card, a debit card, internet banking, a PayPal-like online wallet etc. We 'll make a website instead of Desktop Application so that it would be easy for the customers to book tickets through our system. In next version we'll put more verification steps that the user is valid user or not. In next version we'll work on eligibility of discount for senior & students. We'll verify the eligibility of the person whether the user is eligible for discount or not. We'll also try to add the details like PAN Card number & Aadhar Card Details so that a single user won't create multiple accounts and we'll add another mail id as well so that user will get/recollect the password from that mail id.

# CONCULUSION :

**Conclusion of the Project Bus Ticket Booking System**:

Our project is only a humble venture to satisfy the needs to manage their project work. Several user-friendly coding has also adopted. This package shall prove to be a powerful package in satisfying all the requirements of the school. The objective of software planning is to provide a frame work that enables the manger to make reasonable estimates made within a limited time frame at the beginning of the software project and should be updated regularly as the project progresses.

**At the end it is concluded that we have made effort on following points**.

- A description of the background and context of the project and its relation to work already done in the area.
- Made statement of the aims and objectives of the project. The description of Purpose, Scope, and applicability.
- We define the problem on which we are working in the project.
- We describe the requirement Specifications of the system and the actions that can be done on these things.
- We understand the problem domain and produce a model of the system, which describes operations that can be performed on the system.
- We included features and operations in detail, including screen layouts.
- We designed user interface and security issues related to system.
- Finally, the system is implemented and tested according to test cases.

# BIBIOGRAPHY:

Before and at the time of developing the project following books are feared which gear us seem important guidelines for designing and developing the project and project reports

- Google for problem solving
- http://www.javaworld.com/javaworld/jw-01-1998/jw-01-Credentialreview.html
- Database Programming with JDBC and Java by O'Reilly
- Head First Java 2nd Edition
- http://www.jdbc-tutorial.com/
- Java and Software Design Concepts by Apress
- https://www.tutorialspoint.com/java/
- http://www.javatpoint.com/java-tutorial
- https://docs.oracle.com/javase/tutorial/
- http://www.wampserver.com/en/23
- http://www.JSP.net/
- http://www.tutorialspoint.com/mysql/
- httpd.apache.org/docs/2.0/misc/tutorials.html

# ANNEXURES:

**User interface screens:**

```
BusReservationsystem [Java Application] D:\Software\eclipse-java-2021-
Enter Username: Jack
Enter Password: 123356

Invalid user or password!

Enter Username: Admin
Enter Password: Pass07
***************************************************
** BUS RESERVATION AND TICKETING SYSTEM      **
***************************************************
                                              **
** [1] Destination                            **
** [2] Passengers                             **
** [3] Billing                                 **
** [4] Print                                   **
** [5] Exit
***************************************************
***************************************************
```

```
ENTER CHOICE: 1
*************************************************************
**    DESTINATION              | FARE  |  SEAT           **
*************************************************************
** 1.)PUNE - MUMBAI CITY       | 600   |    20    **
** 2.)PUNE - AURANGABAD        | 170   |    20    **
** 3.)PUNE - SOLAPUR           | 150   |    20    **
** 4.)PUNE - THANE             | 200   |    20    **
** 5.)PUNE -   NASHIK          | 250   |    20    **
*************************************************************
*********************************************************


PWD, STUDENT, & SENIOR CITIZEN with 20% DISCOUNT!!!

Do you want to proceed? [Y/N]: y
********************************************************
** BUS RESERVATION AND TICKETING SYSTEM    **
********************************************************
**                                          **
** [1] Destination                          **
** [2] Passengers                           **
** [3] Billing                              **
** [4] Print                                **
** [5] Exit                                 **
********************************************************
********************************************************
```

```
ENTER CHOICE: 2
**************************************************************
**    DESTINATION            | FARE |  SEAT              **
**************************************************************
** 1.)PUNE - MUMBAI CITY     | 600  |    20    **
** 2.)PUNE - AURANGABAD      | 170  |    20    **
** 3.)PUNE - SOLAPUR         | 150  |    20    **
** 4.)PUNE - THANE           | 200  |    20    **
** 5.)PUNE -   NASHIK        | 250  |    20    **
**************************************************************
**********************************************************

PWD, STUDENT, & SENIOR CITIZEN with 20% DISCOUNT!!!


ENTER PASSENGER'S NAME: JACK
ENTER DESTINATION [number]: 1
HOW MANY PASSENGERS ARE YOU?: 2
HOW MANY PASSENGERS HAVE DISCOUNT?: 1


******************************************
**            PASSENGER'S DETAILS      **
******************************************
PASSENGER'S NAME: JACK
PASSENGER'S DESTINATION : MUMBAI CITY
FARE PRICE: Rs 600.0
NO. OF PASSENGERS: 2
NO. OF PASSENGERS WITH DISCOUNT: 1
******************************************
******************************************


Do you want to proceed? [Y/N]: Y
******************************************
** BUS RESERVATION AND TICKETING SYSTEM   **
```

```
ENTER CHOICE: 3
ENTER PASSENGER'S NAME: JACK
****************************************************
**              PASSENGER'S DETAILS              **
****************************************************
PASSENGER'S NAME: JACK
PASSENGER'S DESTINATION : MUMBAI CITY
FARE PRICE: Rs 600.0
NO. OF PASSENGERS: 2
NO. OF PASSENGERS WITH DISCOUNT: 1
****************************************************
****************************************************


PASSENGER'S TOTAL FARE: Rs 1080.0
ENTER AMOUNT TO PAY: 1080.0
CHANGE: Rs 0.0

Do you want to proceed? [Y/N]:

<
```

**Output reports with data:**

```
BusReservationsystem [Java Application] D:\Software\eclipse-java-2021-
Enter Username: Jack
Enter Password: 123356

Invalid user or password!

Enter Username: Admin
Enter Password: Pass07
*****************************************************
** BUS RESERVATION AND TICKETING SYSTEM     **
*****************************************************
                                              **
** [1] Destination                            **
** [2] Passengers                             **
** [3] Billing                                **
** [4] Print                                  **
** [5] Exit                                   **
*****************************************************
*****************************************************
```

```
ENTER CHOICE: 1
*****************************************************************
**    DESTINATION              |  FARE  |  SEAT              **
*****************************************************************
** 1.)PUNE - MUMBAI CITY       |  600   |    20    **
** 2.)PUNE - AURANGABAD        |  170   |    20    **
** 3.)PUNE - SOLAPUR           |  150   |    20    **
** 4.)PUNE - THANE             |  200   |    20    **
** 5.)PUNE -   NASHIK          |  250   |    20    **
*****************************************************************
*************************************************************

PWD, STUDENT, & SENIOR CITIZEN with 20% DISCOUNT!!!

Do you want to proceed? [Y/N]: y
*******************************************************
** BUS RESERVATION AND TICKETING SYSTEM    **
*******************************************************
**                                           **
** [1] Destination                           **
** [2] Passengers                            **
** [3] Billing                               **
** [4] Print                                  **
** [5] Exit                                  **
*******************************************************
*******************************************************
```

```
ENTER CHOICE: 2
*******************************************************************
**    DESTINATION                | FARE | SEAT                  **
*******************************************************************
** 1.)PUNE - MUMBAI CITY         | 600  |   20   **
** 2.)PUNE - AURANGABAD          | 170  |   20   **
** 3.)PUNE - SOLAPUR             | 150  |   20   **
** 4.)PUNE - THANE               | 200  |   20   **
** 5.)PUNE -  NASHIK             | 250  |   20   **
*******************************************************************
*******************************************************************

PWD, STUDENT, & SENIOR CITIZEN with 20% DISCOUNT!!!


ENTER PASSENGER'S NAME: JACK
ENTER DESTINATION [number]: 1
HOW MANY PASSENGERS ARE YOU?: 2
HOW MANY PASSENGERS HAVE DISCOUNT?: 1


********************************************
**            PASSENGER'S DETAILS        **
********************************************
PASSENGER'S NAME: JACK
PASSENGER'S DESTINATION : MUMBAI CITY
FARE PRICE: Rs 600.0
NO. OF PASSENGERS: 2
NO. OF PASSENGERS WITH DISCOUNT: 1
********************************************
********************************************


Do you want to proceed? [Y/N]: Y
********************************************
** BUS RESERVATION AND TICKETING SYSTEM   **
```

```
ENTER CHOICE: 3
ENTER PASSENGER'S NAME: JACK
*************************************************
**              PASSENGER'S DETAILS            **
*************************************************
PASSENGER'S NAME: JACK
PASSENGER'S DESTINATION : MUMBAI CITY
FARE PRICE: Rs 600.0
NO. OF PASSENGERS: 2
NO. OF PASSENGERS WITH DISCOUNT: 1
*************************************************

*************************************************


PASSENGER'S TOTAL FARE: Rs 1080.0
ENTER AMOUNT TO PAY: 1080.0
CHANGE: Rs 0.0

Do you want to proceed? [Y/N]:

<
```

## Sample program code:

```java
1 package Packageone;
2
3 import java.io.*;
4
5 public class BusReservationsystem {
6
7     public static void main(String args[]) throws IOException {
8         BufferedReader in = new BufferedReader(new InputStreamReader(System.in));
9
10        String user,password,yn,search,again,choice;
11        int to=0,y=1,z=0,end=0,r=1;
12        int available[] = new int[6];
13        int ticketI[][] = new int [100][3];
14        String ticketS[][] = new String[100][3];
15        double ticketD[][] = new double [100][3];
16        double pay[] = new double[20];
17        double change[] = new double[20];
18
19        for(int i=1;i<4;){
20            System.out.print("Enter Username: ");
21            user = in.readLine();
22            System.out.print("Enter Password: ");
23            password = in.readLine();
24
25            //"available[]" is the SEAT AVAILABLE//
26            //store 20 seats every destination [1-5]//
27            for(int o=1; o<=5; o++){
28                available[o]=20;
29            }
30
31            //if user and password are correct proceed to MAIN MENU//
32            if(user.equals("Admin") && password.equals("Pass07")){
33
34                for(int x=1; x==1;){
35                    //the MAIN MENU//
36                    System.out.println("*******************************************");
37                    System.out.println("** BUS RESERVATION AND TICKETING SYSTEM   **");
38                    System.out.println("*******************************************");
39                    System.out.println("** [1] Destination                       **");
40                    System.out.println("** [2] Passengers                        **");
41                    System.out.println("** [3] Billing                           **");
42                    System.out.println("** [4] Print                              **");
43                    System.out.println("** [5] Exit                              **");
44                    System.out.println("*******************************************");
45                    System.out.println("*******************************************\n");
46
```

```java
46
47                  for(x=1; x==1;){
48                      System.out.print("ENTER CHOICE: ");
49                      choice=in.readLine();
50                      |
51                      //if CHOICE is "1" display the DESTINATION//
52                      if (choice.equals("1")){
53                          //the DESTINATION DETAILS//
54                          //display the "Destination", every destination "Fare", and the "Seat" available//
55                          System.out.println("*************************************************************");
56                          System.out.println("**    DESTINATION              | FARE  | SEAT              **");
57                          System.out.println("*************************************************************");
58                          System.out.println("** 1.)PUNE - MUMBAI CITY       | 600   |   "+available[1]+"   **");
59                          System.out.println("** 2.)PUNE - AURANGABAD        | 170   |   "+available[2]+"   **");
60                          System.out.println("** 3.)PUNE - SOLAPUR           | 150   |   "+available[3]+"   **");
61                          System.out.println("** 4.)PUNE - THANE             | 200   |   "+available[4]+"   **");
62                          System.out.println("** 5.)PUNE -  NASHIK           | 250   |   "+available[5]+"   **");
63                          System.out.println("*************************************************************");
64                          System.out.println("*************************************************************\n");
65                          System.out.println("PWD, STUDENT, & SENIOR CITIZEN with 20% DISCOUNT!!!\n");
66                          x=0;
67                      }
68
67                  }
68
69                  //if CHOICE is "2" proceed to Ticket Booking//
70                  else if (choice.equals("2")){
71                      int print=1;
72
73
74
75                      //display first the Destination Details//
76                      System.out.println("*************************************************************");
77                      System.out.println("**    DESTINATION              | FARE  | SEAT              **");
78                      System.out.println("*************************************************************");
79                      System.out.println("** 1.)PUNE - MUMBAI CITY       | 600   |   "+available[1]+"   **");
80                      System.out.println("** 2.)PUNE - AURANGABAD        | 170   |   "+available[2]+"   **");
81                      System.out.println("** 3.)PUNE - SOLAPUR           | 150   |   "+available[3]+"   **");
82                      System.out.println("** 4.)PUNE - THANE             | 200   |   "+available[4]+"   **");
83                      System.out.println("** 5.)PUNE -  NASHIK           | 250   |   "+available[5]+"   **");
84                      System.out.println("*************************************************************");
85                      System.out.println("*************************************************************\n");
86                      System.out.println("PWD, STUDENT, & SENIOR CITIZEN with 20% DISCOUNT!!!\n");
87
88                      if((available[1]==0)&&(available[2]==0)&&(available[3]==0)&&(available[4]==0)&&(available[5]==0)){
89                          System.out.println("Sorry, We don't  have available seats for all Destination!");
90                          x=0;
91
92                      }

95
96                          //inputing of Passenger's Name//
97                          else{
98                          for(x=1; x==1;){
99                              System.out.print("\nENTER PASSENGER'S NAME: ");
100                             ticketS[z][0] = in.readLine();
101
102                             x=0;
103
104                             //if Passenger's Name already used, display error and go back to Inputing//
105                             for(int l=0; l<z; l++){
106                                 if(ticketS[l][0].equalsIgnoreCase(ticketS[z][0])){
107                                     System.out.println("Sorry, Passenger's name have already used!");
108                                     x=1;
109                                 }
110                             }
111                         }
112
113                         //inputing of Destination//
114                         //integers Only [1-5]//
115                         for(x=1; x==1;){
116                             System.out.print("ENTER DESTINATION [number]: ");
117                             to = Integer.parseInt(in.readLine());
118
119                             //if Inputed integers are "<1" or ">5", display error and go back to Inputing//
```

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                                }
                        }

                        //convert the integer to string//
                        String dest[] = { " ", "MUMBAI CITY", "PUNE - AURANGABAD", "PUNE - SOLAPUR", "PUNE - THANE", "PUNE - P
                        double fare[] = { 0,600,170,150,200,250};

                        //converted integer to string, transfer to storage array//
                        ticketS[z][1] = dest[to];
                        ticketD[z][0] = fare[to];

                        //inputing for Number of Passenger's//
                        for(x=1; x==1;){
                        System.out.print("HOW MANY PASSENGERS ARE YOU?: ");
                        ticketI[z][0] = Integer.parseInt(in.readLine());

                            //subtract the available seat by the the number inputed//
                            for(int p=1; p<=5; p++){
                                if(to==p){
                                    print=1;
                                    available[to] = available[to]-ticketI[z][0];

                                    //if the subtracted available seat is "<0", display error//
                                    //add the inputed number to the subtracted seat, to back the original seat//
                                    //display the available seat and back to the inputing//
                                    if(available[to]<0){
                            }

                        //print out of passengers details....
                        if(print==1){
                            System.out.println("\n**************************************");
                            System.out.println("**          PASSENGER'S DETAILS          **");
                            System.out.println("**************************************");
                            System.out.println("PASSENGER'S NAME: " + ticketS[z][0]);
                            System.out.println("PASSENGER'S DESTINATION : " + ticketS[z][1]);
                            System.out.println("FARE PRICE: Rs " + ticketD[z][0]);
                            System.out.println("NO. OF PASSENGERS: " + ticketI[z][0]);
                            System.out.println("NO. OF PASSENGERS WITH DISCOUNT: " + ticketI[z][1]);
                            System.out.println("**************************************");
                            System.out.println("**************************************\n");
                            ticketS[z][2]="0";
                            double discount=(ticketD[z][0]-(ticketD[z][0]*0.2))*ticketI[z][1];
                            ticketD[z][2]= ((ticketI[z][0]-ticketI[z][1])*ticketD[z][0])+discount;
                            x=0;
                        }
                        z++;
                        }
                }

                    for(x=1; x==1;){

                            System.out.print("ENTER PASSENGER'S NAME: ");
                            search = in.readLine();


                            int s=1;
                            for(int b=0;b<z;b++){
                                if(search.equalsIgnoreCase(ticketS[b][0])){
                                    System.out.println("**************************************");
                                    System.out.println("**          PASSENGER'S DETAILS          **");
                                    System.out.println("**************************************");
                                    System.out.println("PASSENGER'S NAME: " + ticketS[b][0]);
                                    System.out.println("PASSENGER'S DESTINATION : " + ticketS[b][1]);
                                    System.out.println("FARE PRICE: Rs " + ticketD[b][0]);
                                    System.out.println("NO. OF PASSENGERS: " + ticketI[b][0]);
                                    System.out.println("NO. OF PASSENGERS WITH DISCOUNT: " + ticketI[b][1]);
                                    System.out.println("**************************************");
                                    System.out.println("**************************************");
                                    s=0;
                                    x=0;

                                    if(ticketS[b][2].equals("x")){
```

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234                                    x=0;
235
236                                    if(ticketS[b][2].equals("x")){
237                                        System.out.println("Passenger's Already Paid!");
238                                        x=0;
239                                    }
240                                    else{
241                                        ticketS[b][2]="x";
242
243
244                                        for(x=1; x==1;){
245                                            System.out.println("\nPASSENGER'S TOTAL FARE: Rs "+ticketD[b][2]);
246                                            System.out.print("ENTER AMOUNT TO PAY: ");
247                                            pay[b] = Double.parseDouble(in.readLine());
248                                            change[b]=pay[b]-ticketD[b][2];
249
250                                            if(change[b]<0){
251                                                System.out.println("Invalid Input!");
252                                                x=1;
253                                            }
254                                            else{
255                                                System.out.println("CHANGE: Rs "+change[b]);
256                                                System.out.println("");
257                                                x=0;
258                                            }
259                                        }
291
292                    for(int sx=1; sx<=3;){
293                    System.out.print("SEARCH PASSENGER'S NAME: ");
294                    search = in.readLine();
295
296                    int s=1;
297                        for(x=0; x<=z; x++){
298                            if(search.equalsIgnoreCase(ticketS[x][0])){
299                                System.out.println("***************************************");
300                                System.out.println("**          PASSENGER'S DETAILS         **");
301                                System.out.println("***************************************");
302                                System.out.println("PASSENGER'S NAME: " + ticketS[x][0]);
303                                System.out.println("PASSENGER'S DESTINATION : " + ticketS[x][1]);
304                                System.out.println("FARE PRICE: Rs " + ticketD[x][0]);
305                                System.out.println("NO. OF PASSENGERS: " + ticketI[x][0]);
306                                System.out.println("NO. OF PASSENGERS WITH DISCOUNT: " + ticketI[x][1]);
307                                System.out.println("TOTAL FARE PRICE: Rs " + ticketD[x][2]);
308                                if(ticketS[x][2].equals("x")){
309                                    System.out.println("PAY: Rs " +pay[x]);
310                                    System.out.println("CHANGE: Rs " +change[x]);
311                                    System.out.println("STATUS: PAID");
312                                }
313                                else{
314                                    System.out.println("STATUS: NOT PAID");
315                                }
316                                System.out.println("***************************************");
317                                System.out.println("***************************************");
```